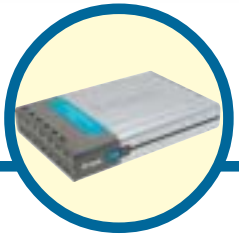
D-Link

Quick Installation Guide

This product can be set up using any current web browser, i.e., Internet Explorer 6 or Netscape Navigator 6.2.3.



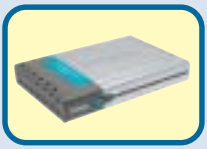
DFL-80

4-Port Ethernet VPN Firewall

Before You Begin

1. If you purchased this Firewall to share your high-speed Internet connection with other computers, you must have either an Ethernet-based Cable or DSL modem with an established Internet account from an Internet Service Provider (ISP).
2. It's best to use the same computer that is connected to your modem for configuring the DFL-80 VPN Firewall. The DFL-80 acts as a DHCP server and will assign all the necessary IP address information on your network. **See Appendix at the end of this Quick Installation Guide or the Manual on the CD-ROM for setting each network adapter to automatically obtain an IP address.**

Check Your Package Contents



DFL-80 4-Port Ethernet VPN Firewall

CD-ROM (containing Manual and Warranty)

Ethernet (Straight Through) Cable

5V DC Power Adapter

Using a power supply with a different voltage rating will damage and void the warranty of this product.

If any of the above items are missing, please contact your reseller.

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Part No. IG-BDFL80

1 Connecting The DFL-80 Firewall To Your Network

A. First, connect the power adapter to the **receptor** at the back panel of the DFL-80 and then plug the other end of the power adapter to a wall outlet or power strip. The Power LED will turn **ON** to indicate proper operation.

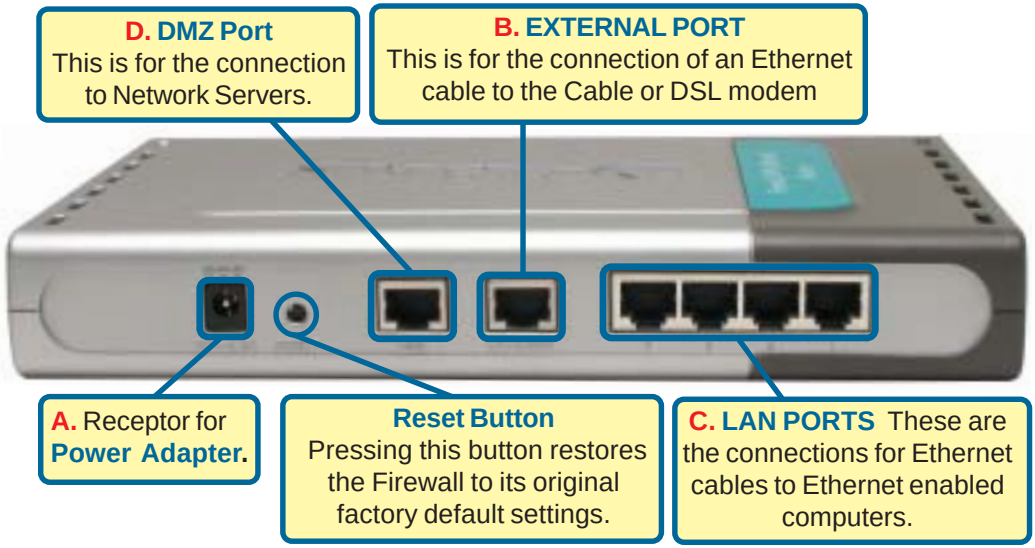
B. 1. Power off your Cable or DSL modem; some devices may not have an on/off switch and will require you to unplug the power adapter. Now, the DFL-80 should be powered on and the Cable / DSL modem should be turned off.

2. Cable / DSL modem (Power Off) – DFL-80 (Power On)
Connect an Ethernet cable to the Ethernet jack located on the Cable / DSL modem. After the Ethernet cable is securely connected, power on the Cable / DSL modem by turning on the unit or plugging in the power adapter.

3. Cable / DSL modem (Power On) – DFL-80 (Power On)
Insert the other end of the Ethernet cable to the EXTERNAL PORT on the back panel of the DFL-80. The EXTERNAL LED light will illuminate to indicate proper connection. If the EXTERNAL LED is not illuminated, please go back to step B and repeat its instructions.

C. Insert an Ethernet cable to **LAN port 1** on the back panel of the DFL-80 and an available Ethernet port on the network adapter in the computer you will use to configure the DFL-80. The LED light for LAN Port 1 will illuminate to indicate proper connection. (Note: The LAN Ports on the DFL-80 are Auto-MDI/MDIX. Meaning you can use a straight-through or crossover-Ethernet cable to the LAN Ports.)

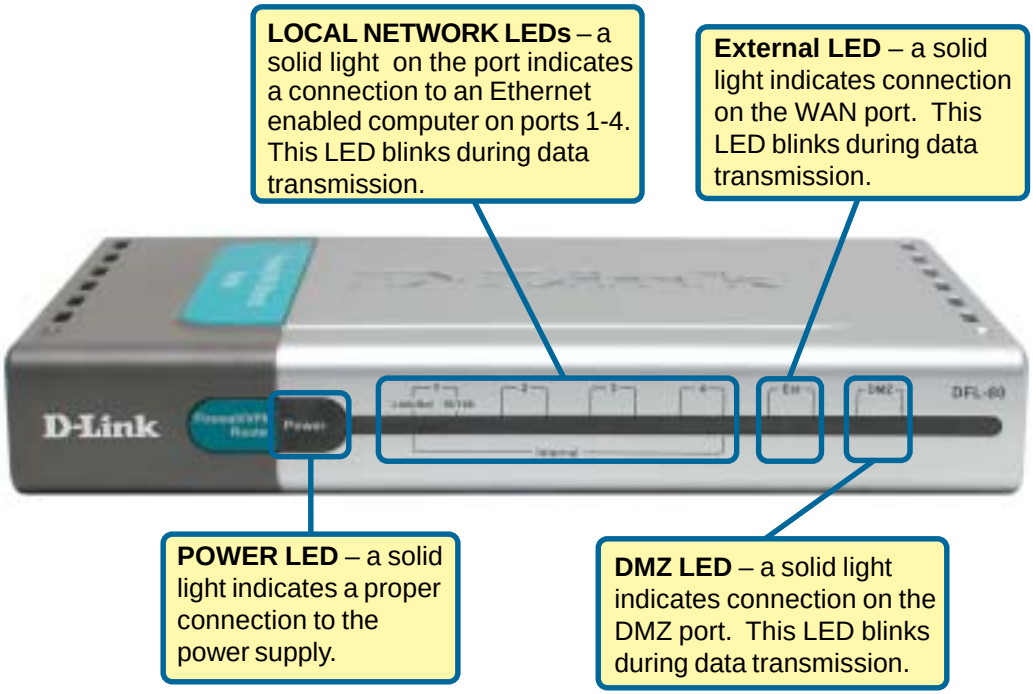
D. DMZ port is used to connect to a DMZ network which contains Network Servers.


D. DMZ Port
This is for the connection to Network Servers.
B. EXTERNAL PORT
This is for the connection of an Ethernet cable to the Cable or DSL modem
A. Receptor for Power Adapter.
Reset Button
Pressing this button restores the Firewall to its original factory default settings.
C. LAN PORTS These are the connections for Ethernet cables to Ethernet enabled computers.

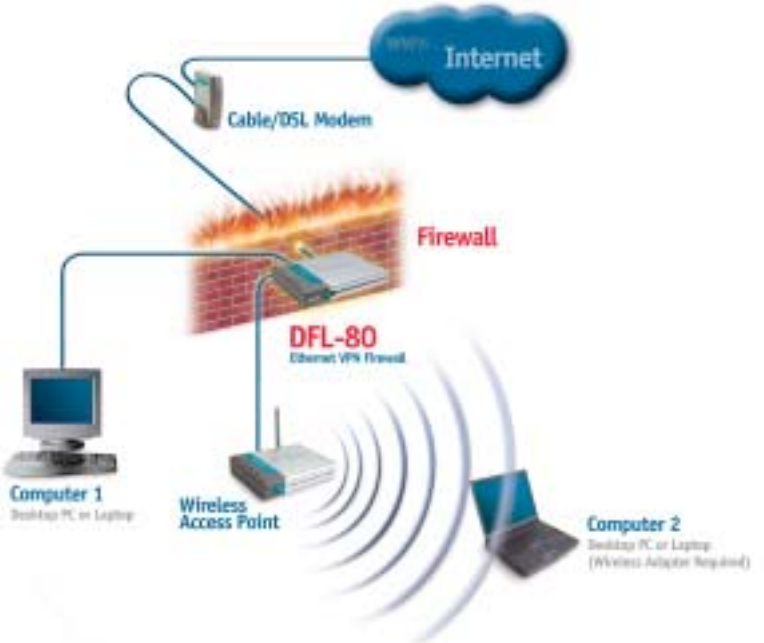
2 Restart Your Computer

3 Connecting Additional Computers To The DFL-80

Using additional Ethernet (CAT5 UTP) cables, connect your Ethernet-equipped computers to the remaining Ethernet LAN ports on the back panel of the DFL-80

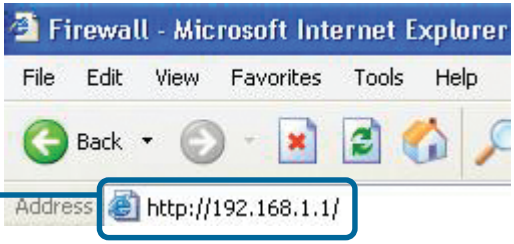

LOCAL NETWORK LEDs – a solid light on the port indicates a connection to an Ethernet enabled computer on ports 1-4. This LED blinks during data transmission.
External LED – a solid light indicates connection on the WAN port. This LED blinks during data transmission.
D-Link
Power
DMZ
DFL-80
POWER LED – a solid light indicates a proper connection to the power supply.
DMZ LED – a solid light indicates connection on the DMZ port. This LED blinks during data transmission.

When you have completed the steps in this *Quick Installation Guide*, your connected network should look similar to this:



4 Using The Setup Wizard

Open your Web browser and type **"http://192.168.1.1"** into the URL address box. Then press the **Enter** or **Return** key.



The log-on pop-up screen will appear.

Type "admin" for the username and **"admin"** for the password

Click OK

4 The Setup Wizard (continued)

Once you have logged in, the **Home** screen will appear.

Click **Setup Wizard**

You will see the following screens

D-Link
DFL-80 Setup Wizard
Welcome to the DFL-80 Setup Wizard. The Wizard will guide you through these four quick steps. Begin by clicking on Next.
Step 1. Set your new password
Step 2. Choose your time zone
Step 3. Set Internet connection
Step 4. Set Outgoing Policy
Step 5. Save & Restart
Next
Exit

Click **Next**

Set up your new password.
You have the option to establish a password, for the **Admin** account

Click **Next**

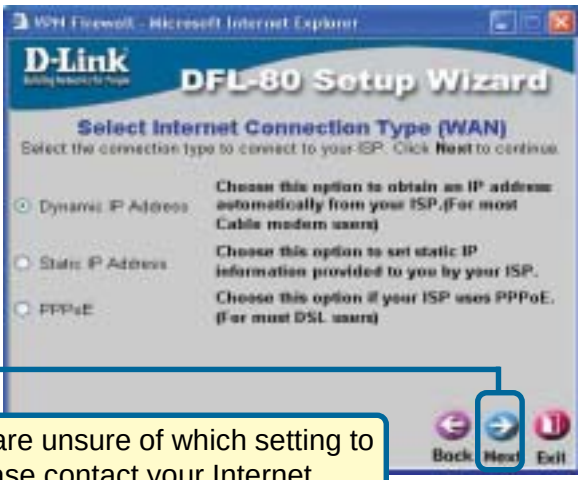
4 The Setup Wizard (continued)

Choose your time zone based from GMT time. Click on **Assist** to select your time zone from the available selections.

VPN Firewall - Microsoft Internet Explorer
D-Link
DFL-80 Setup Wizard
Choose Time Zone
Select the appropriate time zone for your location and click Next to continue.
Set offset -5 hours from GMT Assist
Back
Next
Exit

Click **Next**

Select your Internet Connection. You will be prompted to select the type of Internet connection for your network.

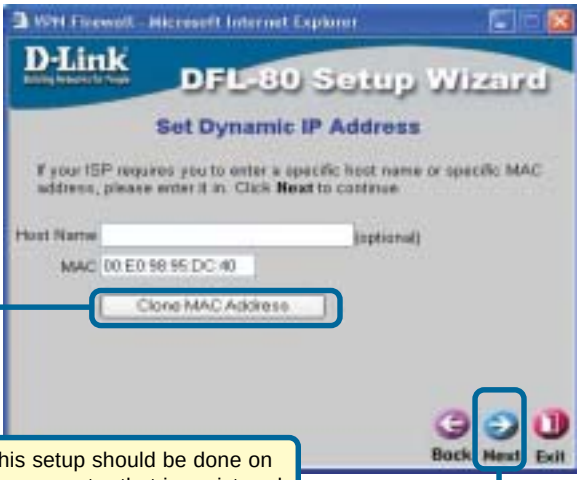

VPN Firewall - Microsoft Internet Explorer
D-Link
DFL-80 Setup Wizard
Select Internet Connection Type (WAN)
Select the connection type to connect to your ISP. Click Next to continue.
Dynamic IP Address
Choose this option to obtain an IP address automatically from your ISP.(For most Cable modem users)
Static IP Address
Choose this option to set static IP information provided to you by your ISP.
PPPoE
Choose this option if your ISP uses PPPoE. (For most DSL users)
Back
Next
Exit

Click **Next**

If you are unsure of which setting to select, please contact your Internet Service Provider.

4 The Setup Wizard (continued)

If you selected **Dynamic IP Address**, this screen will appear: (Used mainly for Cable Internet service.)



Click the "**Clone MAC Address**" button to automatically copy the MAC address of the network adapter in your computer. You can also manually type in the MAC address.

This setup should be done on the computer that is registered on the ISP's network.

Click Next

Please continue to the last part of step 4, **Set Outgoing Policy**.

If your ISP requires a **Static IP Address**, and this option is selected, then this screen will appear:

Enter the IP address information originally provided to you by your ISP. You will need to complete all the required fields.

Click Next

Please continue to the last part of step 4, **Set Outgoing Policy**.

4 The Setup Wizard (continued)

If your ISP uses **PPPoE** (Point-to-Point Protocol over Ethernet), and this option is selected, then this screen will appear: (Used mainly for DSL Internet service.)

Please be sure to remove any existing PPPoE client software installed on your computers.

Enter in the username and password provided to you by your ISP.

Click Next

Set Outgoing Policy. You will be prompted to select the type of Internet connection for your network.

Make sure that **Any Services** is selected.

Click Next

5 Your Setup is Complete!

VPN Firewall - Microsoft Internet Explorer
D-Link
DFL-80 Setup Wizard
Setup Completed
The Setup Wizard has completed. Click on Back to modify changes or mistakes. Click Restart to save the current settings and reboot the DFL-80.
Back
Restart
Exit

Click Restart

Please wait for the DFL-80 to save the changes and reboot. When the DFL-80 has finished rebooting, you will be brought back to the main web page.

Test Internet Connection.

You will be returned to the **main web page.**

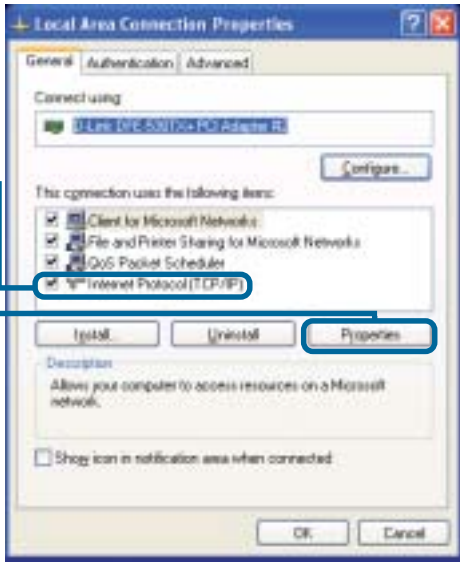
Then **relaunch** your Web browser (i.e., *Internet Explorer* or *Netscape Navigator*), to link to your favorite Web site to test your Internet connection.

For additional settings or information, refer to the Manual located on the CD.

APPENDIX

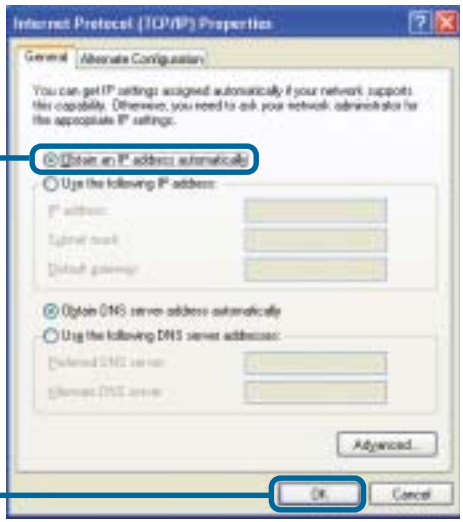
To connect to the network, make sure the network adapter in your computer is configured properly. Here's how to configure the network adapter to obtain an IP address automatically for the DFL-80 Firewall.

For **Microsoft Windows XP:**
Go to **Start** > **right click** on **My Network Places** > select **Properties** > **Double-click** on the **Network Connection** associated with the Ethernet adapter (i.e., D-Link DFE-530TX+).



Click **Internet Protocol (TCP/IP)**

Click **Properties**



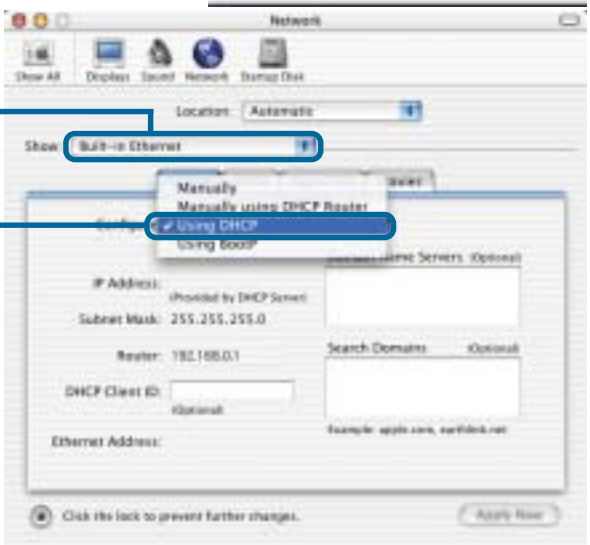
Select **Obtain an IP address automatically**

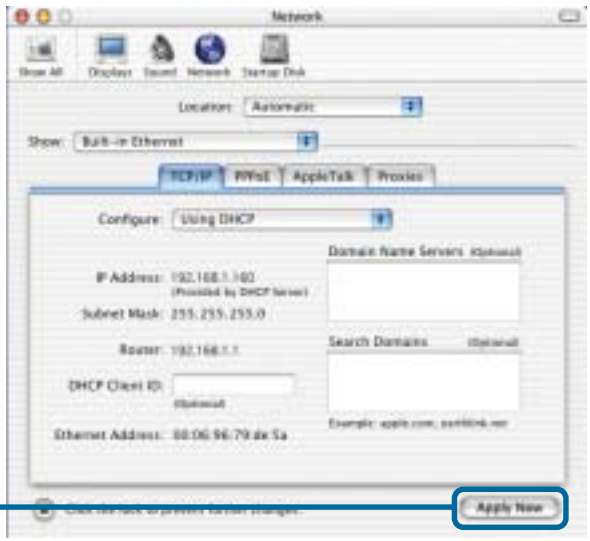
Click **OK**

Restart your computer (if necessary)

For **Apple Macintosh OS X:**

Go to **the Apple Menu**
Click on Network
and **Select System Preferences**

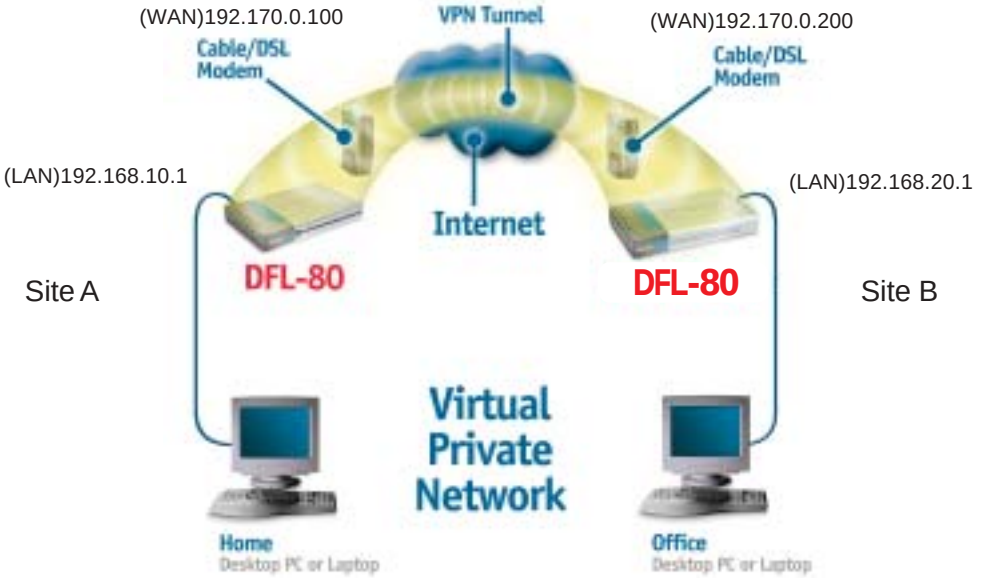




The IP address information, the Subnet Mask, the Router's IP address and the Ethernet adapter address will appear

APPENDIX (continued)

This example will demonstrate how to create a Virtual Private Network (VPN) between two remote locations through the Internet. The VPN policy will use IPSec to securely send/receive encrypted data over the Internet. This example will consist of two DFL-80 VPN Firewalls with a simple setup to enable VPN. The two remote locations in this example will be called Site A and Site B. Both firewalls must already be set up and able to communicate with each other.



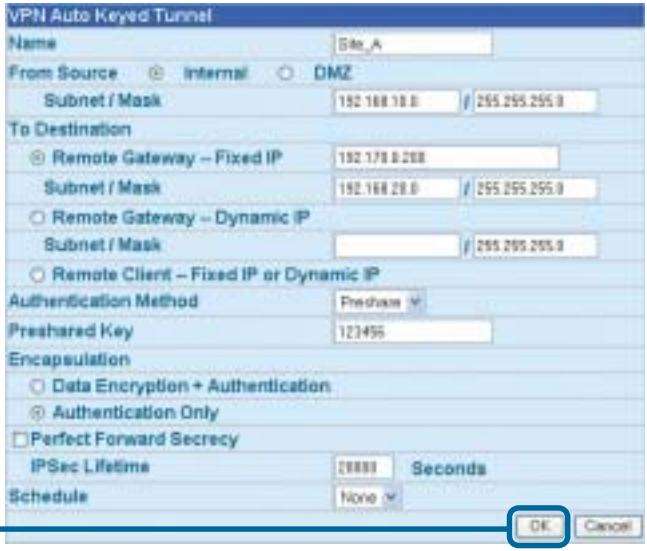
Please note the differences in the IP addresses for each site.

We will begin by configuring the DFL-80 at Site A . Start by going into the web configuration. Once in, go to the **VPN** menu. You should now be under **VPN>Autokey**

The IP Address information used for Site A and Site B are example IP Addresses Only.

Please fill in the appropriate information for Site A.

Name: Site_A
From Source: Internal
Subnet/Mask: 192.168.10.0/255.255.255.0
Remote Gateway – Fixed IP: 192.170.0.200
Subnet/Mask: 192.168.20.0/255.255.255.0
Authentication Method: Preshare
Preshare Key: 123456
Encapsulation: Encryption (ESP)



Click OK

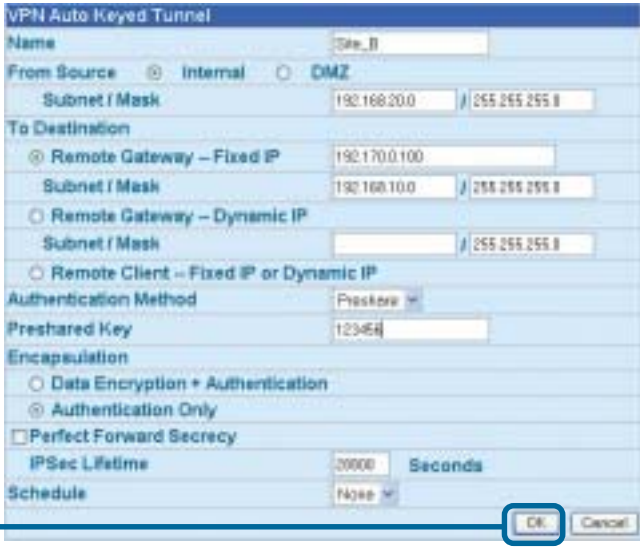
123456 is an example of a preshare key, please fill in any secret preshare key you desire. Keep in mind that both sites require the same preshare key.

There should now be a VPN policy created for Site A. Site A is now complete, we will now configure Site B with the other DFL-80. Follow the same steps previously with Site A to create a VPN policy. Please change the appropriate IP information.

Name	Gateway IP	Destination Subnet	PSK/RSA	Status	Configure
Site_A	192.170.0.200	192.168.20.0	psk	Disconnect	Connect Modify Remove

Please fill in the appropriate information for Site B

Name: Site_B
From Source: Internal
Subnet/Mask: 192.168.20.0/255.255.255.0
Remote Gateway – Fixed IP: 192.170.0.100
Subnet/Mask: 192.168.10.0/255.255.255.0
Authentication Method: Preshare
Preshare Key: 123456
Encapsulation: Encryption (ESP)



Click OK

123456 is an example of a preshare key, please fill in any secret preshare key you desire. Keep in mind that both sites require the same preshare key.

There should now be a VPN policy created for Site B. After the VPN policies have been created for the two remote locations, click **Connect** at both Sites to enable the VPN policy. The two remote locations will authenticate and the VPN status should now say **Connected**. Congratulations, you have created a simple IPSec VPN tunnel. Site A and Site B should now be able to communicate with each other securely over the Internet. All IP traffic from the two Sites are now encrypted strongly with 168-bit 3DES encryption.

Name	Gateway IP	Destination Subnet	PSK/RSA	Status	Configure
Site_B	192.170.0.100	192.168.10.0	psk	Disconnect	Connect Modify Remove

Technical Support

You can find software updates and user documentation on the D-Link website.

D-Link provides free technical support for customers within the United States and within Canada for the duration of the warranty period on this product.

U.S. and Canadian customers can contact D-Link technical support through our website, or by phone.

Tech Support for customers within the United States:

D-Link Technical Support over the Telephone:
(877) 453-5465
24 hours a day, seven days a week.

D-Link Technical Support over the Internet:
http://support.dlink.com
email:support@dlink.com

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